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EXAMINER

DIVECHA, KAMAL B

ART UNIT

PAPER NUMBER

2151

DATE MAILED: 05/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/943,766

Applicant(s)

GRAHAM, JOHN C.

Examiner

KAMAL B. DIVECHA

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04/01/2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) 9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08/30/2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**Response to Arguments**

This action is in response to the arguments filed on 04/04/2005. Claims 1-8 and 10-47 are pending in this application.

Applicant has respectfully cancelled claim 9.

Applicant has amended claims 1-11. Therefore, the examiner withdraws 35 USC 112, 2<sup>nd</sup> paragraph rejection with respect to claims 1-11.

Applicant failed to respond to the objections made with respect to the drawings. Therefore, the examiner maintains the objections with respect to drawings.

Applicant's arguments filed 04/04/2005 with respect to claims 12, 20, 26, 30 and 39 have been fully considered but they are not persuasive. Applicant has amended the claims so as to add a limitation that was not disclosed in the specification as originally filed (page 18 of applicant arguments). The recited limitation "plurality of metering packets are received that correspond to a single session" and "generating a plurality of metering packets corresponding to a single session" which applicant is relied upon was not disclosed the specification and/or in disclosure. Therefore, the examiner maintains the rejections with respect to independent claims 12, 20, 26, 30 and 39.

Applicant's arguments with respect to claims 1, 3, 6, 17, 34 and 43 have been considered but are moot in view of the new ground(s) of rejection.

**Claim Objections**

Claim 10 is objected to because of the following informalities: claim 10 is dependent on claim 9, but claim 9 has been cancelled by the applicant as per amendment received on April 4, 2005. Appropriate correction is required.

**Claim Rejections - 35 USC § 112**

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 20-21, 26, 30-31 and 39-40 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

With respect to claim 20 and the recited limitation “the server monitoring metering packets that are received from the at least one client corresponding to the one or more sessions, wherein a plurality of metering packets are received that correspond to a single session” on page 7, applicant has failed to provide any meaningful support for this limitation in the disclosure or specification.

With respect to claim 21 and the recited limitation “wherein a plurality of metering packets are received that include both a session-ending metering packet and a session-in-progress metering packet” on page 7, applicant has also failed to provide any meaningful support for this limitation in his disclosure.

With respect to claim 26, applicant has failed to provide any support in the disclosure for the recited limitation “receiving metering packets from the at least one client, wherein a plurality of the metering packets are received from the at least one client for a single session” on page 9.

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With respect to claim 30 and the recited limitation “generating a plurality of metering packets corresponding to a single session” on page 10, applicant has failed to provide any meaningful support for this limitation in the disclosure or specification.

With respect to claim 31 and the recited limitation “wherein a plurality of metering packets are generated and sent over regular, periodic intervals, and wherein metering packets include both a session-ending metering packet and a session-in-progress metering packet”, applicant has also failed to provide any meaningful support for this limitation in his disclosure.

As per claims 26, 39-40, they disclose the same limitations as in claims 21 and 30-31. Therefore claims are rejected for the same reasons as set forth in claims 21 and 30-31. Please Note the reference pages refer to amendment “A” filed on April 1, 2005.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 12, 20, 26, 30 and 39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 12 and 20 recites the limitation “wherein plurality of metering packets are received that correspond to a single session” in the claims. There is insufficient antecedent basis for this limitation in the specification and in the claims.

Claims 26 recites the limitation “wherein a plurality of metering packets are received from the at least one client for a single session” in the claims. There is insufficient antecedent basis for this limitation in the specification and in the claims.

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Claims 30 and 39 recites the limitation “generating a plurality of metering packets corresponding to a single session” in the claims. There is insufficient antecedent basis for this limitation in the specification and in the claims.

Claims 13, 21, 31 and 40 recites the limitation “plurality of metering packets are received that include both a session-ending metering packet and a session-in-progress metering packet. There is insufficient antecedent basis for this limitation in the specification and in the claims.

**Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 11, 17, 34 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allard et al. (hereinafter Allard, U.S. Patent No. 6,018,619).

As per claim 1, Allard discloses a computer network that comprises one or more servers providing one or more services to at least one client (figure 1 block #20, #18, #10 and the communication link between them), wherein some access to the one or more services may incur an access charge and other access to the one or more services may not incur an access charge, and wherein the at least one client may terminate access to the one or more services in a variety of ways (column 7 lines 12-20), a method of tracking the at least one client's usage of the one or more services (see abstract), the method comprising acts of: a server receiving a session identifier associated with one or more sessions through which the at least one client accesses the one or more services provided by the one or more servers, the one or more sessions having been

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created in response to a login request from the at least one client (column 11 lines 49-61 and column 15 lines 63-65; figure 4B block #90, #97, #98, and #100 and column 5 lines 35-44); the server receiving one or more metering packets from the at least one client (figure 4A block #76; figure 5 block #110), wherein each of the one or more metering packets includes a time element indicating the client's usage of the one or more services (see abstract; column 14 lines 15-21), the time element comprising a charged time portion, the charged time portion corresponding to some access to the one or more services that incurs an access charge (col. 7 L21-64); and the server updating a usage database based on the received one or more metering packets so that the usage database reflects the at least one client's usage of the one or more services provided by the one or more servers (figure 3 block #70; figure 4B block #108), however Allard does not explicitly disclose the time element comprising a free time portion, the free time portion corresponding to other access to the one or more services that does not incur an access charge. But Allard also discloses a packet having an option field and an interest field that indicates if the client was interrupted during download and the percentage of object viewed and also suggests that a multitude of other statistics may be determined useful and can be implemented as part of his (Allard) invention (col. 7 L12 to col. 8 L3, col. 11 23 to col. 12 L2; col. 13 L33-47). Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Allard to include a time element in a packet having both a charged time portion that incurs access charges and a free time portion that does not incur access charge to one or more services. One of ordinary skilled in the art would have been motivated because since WWW is based on a stateless protocol, an information server will have no way of tracking clients usage on its own (Allard, col. 13 L30-33). Therefore, these variety of options including

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charge time portion and free time portion would have allowed a wealth of information to be communicated to the service provider for billing the clients accordingly.

As per claim 2, Allard discloses the process wherein a plurality of metering packets are received over regular, periodic intervals (see abstract).

As per claim 3, Allard discloses the process wherein each of the one or more metering packets is one of a session-ending metering packet and a session-in-progress metering packet (column 11 lines 11-15 and column 14 lines 50-55).

As per claim 11, Allard discloses a method as in claim 1, further comprising an act of sending one or more headers to the at least one client, wherein the one or more headers include **at least one of** (i) an indication that the at least one client should track usage of the one or more services provided by the one or more servers (column 5 lines 36-48 and column 6 lines 36-45), (ii) a unique session identifier, and (iii) a metering interval indicating how frequently the at least one client should send metering packets (see abstract and column 6 lines 22-35).

As per claim 17, 34 and 43, they do not teach or further define over the limitations in claims 1-3 and 11. Therefore, claims 17, 34 and 43 are rejected for the same reasons as set forth in claims 1-3 and 11.

4. Claims 4-6, 32 and 41 are rejected under 35 U.S.C. 103(a) as being obvious over Allard et al. (U.S. Patent No. 6,018,619) in view of Dice (U.S. Patent No. 6,289,451 B1).

As per claim 4, Allard et al does not explicitly disclose the process of receiving a session key associated with the one or more sessions; hashing at least a portion of each metering packet and the corresponding session key to generate an authentication element; and comparing the



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generated authentication element with a packet authentication element included with each metering packet to determine whether or not each packet is genuine.

Dice discloses a system and method for efficiently implementing an authenticated communications channel that facilitates tamper detection. Dice further discloses a means for receiving the stored session key value from the session control portion (column 8 lines 38-62; column 9 lines 43-56; column 15 lines 42-43), a communication device generating a hash value from the augmented information packet (read as hashing portion of data and session key)(column 6 lines 53-65; column 15 lines 51-55), it also generates a session key which is encrypted and transferred to the other device (column 6 lines 30-52) and comparing the generated hash value to the hash value received in the message packet (column 10 lines 8-32; column 16 lines 47-49). Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to incorporate the teaching of Dice as stated above with the Allard for the purpose of receiving, hashing a session key (encrypting) and decrypting and comparing to determine the tampering of the packet.

One of ordinary skilled in the art would have been motivated because it would have ensured secured communications (Dice, see abstract, column 1 lines 33-47 and column 4 lines 28-67 and column 5 lines 15-22; column 14 lines 23-25).

As per claim 5, Allard does not explicitly disclose the process wherein a login service receives the login request from and negotiates a given session key with the at least one client, and wherein a census service receives the one or more metering packets, and the process where login service sending a hash of the given session key and a session identifier to the census service, such that the received session key is the hash of the given session key. Dice discloses a

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system set forth above and he further teaches the session establishment (read as login service comprising request/response protocol) and protocol negotiating operation (column 6 lines 30-65). A message packet comprising the information packet and the hash value is received from a communication device (read as census service receiving one or more packets) (column 7 lines 8-15; column 16 lines 43-44). The message transfer portion is also used during the session establishment and protocol negotiation operation, in particular transferring the encrypted session key value (read as hash of session key) provided by the session control key portion to the other communication device (column 8 lines 51-55; column 15 lines 34-35). Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to incorporate the teaching of Dice as stated above with Allard in order to establish a session, generate a session key, hashing a session key and sending the hash to the server. One of ordinary skilled in the art would have been motivated because of the same reasons as set forth in claim 4.

As per claim 6, Allard discloses the process of retrieving an indicator from a configuration database indicating that usage should be tracked for all clients attempting to login (see col. 5 L27-55 and col. 11 L22-41 of Allard and applicant disclosure paragraph 14).

As per claim 32, Dice further discloses the process of storing each authentication element (hash of session key) in the corresponding metering packet (column 4 lines 32-36). Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to incorporate the teaching of Dice a stated above with Allard in order to store the hash value in the packet. One of ordinary skilled in the art would have been motivated because of the same reasons as set forth in claim 4.

As per claim 41, it does not teach or further define over the limitation in claim 32.

Therefore, claim 41 is rejected for the same reason as set forth in claim 32.

5. Claims 7-8, 10, 18, 24, 35 and 44 are rejected under 35 U.S.C. 103(a) as being obvious over Allard et al (U.S. Patent No. 6,018,619) in view of Dietz et al. (hereinafter Dietz, U.S. Patent No. 6,651,099 B1).

As per claim 7, Allard does not explicitly disclose the process wherein plurality of metering packets are received and wherein one or more of the plurality of received metering packets are redundant, the method further comprising acts of: prior to updating the usage database, searching a cache of at least one received metering packet; if a copy of a particular metering packet is found in the cache, identifying the particular metering packets as redundant and not updating the usage database based on the particular metering packet; and if a copy of the particular metering packet is not found in the cache, adding the particular metering packet to the cache and updating the usage database based on the particular metering packet.

Dietz explicitly discloses method an apparatus for monitoring traffic in a network. The method includes receiving a packet from a packet acquisition device and performing one or more operations. The method further includes looking up a flow-entry database (read as searching a cache; column 14 lines 35-37) containing flow-entries for previously encountered conversational flows (column 6 lines 48-49). The lookup uses the selected packet portions and determining if the packet is of an existing flow, if the packet is of an existing flow, the method classifies the packet as belonging to the found existing flow (read as redundant), and if a packet is of a new flow, the method stores a new flow-entry for the new flow in the database (see abstract) and updates a database after classifying (figure 3 step #316, #318, #328, #330, #332, #322 and #324;

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column 21 lines 7-14). Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to incorporate the teaching of Dietz as stated above with Allard et al for the purpose of searching, identifying a redundant packet, saving or adding a packet and updating a database.

One of ordinary skilled in the art would have been motivated because it would have eliminated the possibility of redundant conversational exchanges of packets (Dietz: column 3 lines 1-43; column 4 lines 42-67; column 6 lines 1-57) and hence improve the storage efficiency.

As per claim 8, Allard does not explicitly disclose the process wherein each metering packet comprises a session identifier element and a sequence number element, and wherein finding the particular metering packet in the cache is based on comparing the session identifier element and the sequence number element that are included in the packet. Dietz discloses the process wherein each packet comprises a session identifier element and a sequence number element (column 4 lines 45-47 and column 5 lines 6-9; column 13 lines 65-67), and wherein searching the particular packet in the cache is based on comparing the session identifier element and the sequence number element of the packet (column 6 lines 55-57 and column 25 lines 29-33; column 24 lines 32-36). Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to incorporate the teaching of Dietz as stated above with Allard in order to search a packet. One of ordinary skilled in the art would have been motivated because it would have enabled fast lookups of entries in the database since the session identifier and sequence number are unique for each session (Dietz: column 13 lines 8-36; column 14 lines 14-35).

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As per claim 10, Allard does not explicitly disclose the process wherein each metering packet comprises a packet type element, a sequence number element, a session identifier element and a packet authentication element. Dietz explicitly discloses the process of monitoring traffic in a network wherein each packet comprises (i) a packet type element (figure 17A item #1702), (ii) a sequence number element (figure 17B and column 13 lines 62-67), (iii) a session identifier element (figure 17B), and (iv) a packet authentication element (figure 17A item #1708).

Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to incorporate the teaching of Dietz as stated above with Allard for including packet type element, sequence number, session identifier and authentication element in the packet. One of ordinary skilled in the art would have been motivated because these elements are well known and standard elements included of the packet. Another motivation would have been so that each packet is distinguished and securely transmitted across a channel wherein at the receiving end, the packet would have been compared with the other packets (Dietz: column 13 lines 8-36; column 14 lines 14-35).

As per claims 18, 24, 35 and 44, they do not teach or further define over the limitations in claims 1, 7-8 and 10. Therefore, claims 18, 24, 35 and 44 are rejected for the same reasons set forth in claims 1, 7-8 and 10.

### **DETAILED ACTION**

#### **Drawings**

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: #220c of figure 2.

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The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters “232b” and “232n” of figure 2 have both been used to designate “email service”.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character “232n” has been used to designate both “other services” and “email services”.

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

**Claim Rejections - 35 USC § 102**

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 12-13, 15, 19-21, 25-26, 29-31, 36-40, and 45-47 are rejected under 35 U.S.C. 102(b) based upon the invention anticipated by Allard et al. (U.S. Patent No. 6,018,619).

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As per claim 12, Allard discloses a computer network that comprises one or more servers providing one or more services to at least one client (figure 1 block #20, #18, #10 and the communication link between them), wherein some access to the one or more services may incur an access charge and other access to the one or more services may not incur an access charge, and wherein the at least one client may terminate access to the one or more services in a variety of ways (column 7 lines 12-20), a method of tracking the at least one client's usage of the one or more services (see abstract), the method comprising steps for: a server identifying one or more sessions through which the at least one client accesses the one or more services provided by the one or more servers, the one or more sessions having been created in response to a login request from the at least one client (column 5 lines 27-40); the server monitoring metering packets that are received from the at least one client corresponding to the one or more sessions, wherein a plurality of metering packets are received that correspond to a single session and that each includes a time element (column 7 lines 11-67) indicating the client's usage of the one or more services (column 7 lines 36-39; figure 4A step #84 and figure 3 step #50); and the server tracking the at least one client's usage of the one or more services provided by the one or more servers based on the received one or more metering packets (column 6 lines 65-67 to column 7 lines 1-5; figure 2 item #40; figure 5 item #124 and column 9 lines 1-5).

As per claim 13, Allard discloses the process wherein the plurality of metering packets includes both a session-ending metering packet and a session-in-progress metering packet (see abstract and column 16 lines 15-22; col. 7 L5-50 and col. 11 L10-42).

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As per claim 15, Allard discloses the process for enabling usage tracking in at least one of a configuration database and a database of clients (figure 2 block #46 and #48 and block #22 and 26; column 19 lines 53-59).

As per claim 19, Allard discloses the process for communicating one or more usage tracking parameters (column 5 lines 36-40) to the at least one client, wherein the one or more usage tracking parameters **include at least one of** (i) an indication that the at least one client should track usage of the one or more services provided by the one or more servers (column 5 lines 36-48 and column 6 lines 36-45), (ii) a unique session identifier, and (iii) a metering interval indicating how frequently the at least one client should send metering packets (see abstract and column 6 lines 22-35).

As per claim 26, Allard discloses a computer network that comprises one or more servers providing one or more services to at least one client (figure 1 block #20, #18, #10 and the communication link between them), wherein some access to the one or more services may incur an access charge and other access to the one or more services may not incur an access charge, and wherein the at least one client may terminate access to the one or more services in a variety of ways (column 7 lines 12-20), a method of tracking the at least one client's usage of the one or more services (see abstract), comprising: a communication means (figure 1) for receiving (i) a session identifier associated with one or more sessions through which the at least one client accesses the one or more services provided by one or more servers, and (ii) metering packets from the at least one client, wherein a plurality of the metering packets are received from the at least one client for a single session that each includes a time element indicating the at least one client's usage of the one or more services (figure 1 shows all the communications links; column 9



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lines 49-50); usage means for tracking the at least one client's usage of the one or more services (column 5 lines 55-63; column 6 lines 65-67 to column 7 lines 1-5; column 9 lines 1-5 – session event); processor means for updating the usage means based on one or more received metering packets so that the usage means reflects the at least one client's usage of the one or more services provided by one or more servers (column 12 lines 54-60 and algorithm of figure 3 executed in client system or smart client system).

As per claim 29, Allard discloses the system wherein the communication means (figure 1 shows one of the communication means) receives a plurality of packets that include session-ending metering packet and a session-in-progress metering packet (see abstract and column 16 lines 15-22; column 16 lines 15-22; col. 7 L5-50 and col. 11 L10-42).

As per claim 30, Allard discloses a computer network that comprises one or more servers providing one or more services to at least one client (figure 1 block #20, #18, #10 and the communication link between them), wherein some access to the one or more services may incur an access charge and other access to the one or more services may not incur an access charge, and wherein the at least one client may terminate access to the one or more services in a variety of ways (column 7 lines 12-20), a method of tracking the at least one client's usage of the one or more services (see abstract), comprising acts of: sending a login request to a login service (figure 3 step #60); accessing, through one or more sessions created in response to the login request, at least one of the one or more services provided by one or more servers (figure 5 step #110, #126, #116, and #120); generating a plurality of metering packets corresponding to a single session that each includes a time element indicating the client's usage of the one or more services (figure 4A step #78 and column 7 lines 50-65; column 11 lines 48-67 to column 12 lines 1-2); and sending

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at least one of the plurality of metering packets to a census service, wherein the census service updates a usage database based on the metering packets so that the usage database reflects the at least one clients usage of the one or more services provided by the one or more servers (figure 3 step #74 and #70; col. 11 L23-55 and col. 7 L15-64).

As per claim 31, Allard discloses the process wherein plurality of metering packets are generated and sent over regular, periodic intervals, and wherein each metering packets include both a session-ending metering packet and a session-in-progress metering packet (see abstract and column 16 lines 15-22; column 16 lines 15-22; col. 7 L5-50 and col. 11 L10-42).

As per claim 37, Allard discloses the process further of storing metering information in non-volatile memory (column 9 lines 57-60).

As per claim 38, Allard discloses the process of sending the stored metering information to the census service in a subsequent session (see abstract and column 9 lines 61-64).

As per claims 20, 21, 25, 36, 39, 40 and 45-47, they do not teach or further define over the limitations in claims 12-13, 15, 19, 26, 29-31, 37 and 38. Therefore, claims 20, 21, 25, 36, 39, 40 and 45-47 are rejected for the same reasons as set forth in claims 12-13, 15, 19, 26, 29-31, 37 and 38.

**Claim Rejections - 35 USC § 103**

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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9. Claims 14, 16, 22-23 and 27-28 are rejected under 35 U.S.C. 103(a) as being obvious over Allard et al (U.S. Patent No. 6,018,619) in view of "official Notice".

As per claim 14, Allard does not explicitly disclose the process for authenticating the one or more metering packets and a processor means for authenticating the one or more metering packets. In fact, the process of authenticating packets and means for authenticating packets is obvious and well known in the art. Therefore, Official Notice is taken with respect to claim 14 to indicate that it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to authenticate packets. One of ordinary skilled in the art would have been motivated because it would have prevented information to be compromised.

As per claim 16, Allard does not explicitly disclose the process wherein plurality of metering packets are received and wherein one or more plurality of received packet are redundant, the method further comprising a step for discarding the one or more of the plurality of received metering packets that are redundant. In fact, the process of discarding redundant packets is obvious and well known in the art. Therefore, Official Notice is taken with respect to claim 16 to indicate that it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to discard the redundant packets. One of ordinary skilled in the art would have been motivated because it would have improved the storage efficiency.

As per claims 22, 23, 27, and 28, they do not teach or further define over the limitations in claims 14 and 16. Therefore, claims 22, 23, 27 and 28 are rejected for the same reasons set forth in claims 14 and 16.

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10. Claims 33 and 42 are rejected under 35 U.S.C. 103(a) as being obvious over Allard et al (U.S. Patent No. 6,018,619) in view of Schuster et al. (hereinafter Schuster, U.S. Patent No. 6,170,075 B1).

As per claim 33, Allard does not explicitly disclose the process of sending redundant metering packets to the census service using a communication protocol that does not guarantee delivery (UDP protocol).

Schuster explicitly teaches the process of using User Datagram Protocol (column 1 lines 35-46). Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to incorporate the teaching of Schuster as stated above with Allard in order to transmit or send the redundant packets to the server through UDP link. One of ordinary skilled in the art would have been motivated because UDP is unreliable connectionless protocol, which facilitates sending and receiving of packets but does not include any intelligence to establish acknowledgements, and in general UDP is used by applications that do not want TCP's sequencing or flow control and wish to provide their own (Schuster, col. 1 L41-47).

As per claim 42, it does not teach or further define over the limitation in claim 33. Therefore, claim 42 is rejected for the same reasons as set forth in claim 33.

**Additional References**

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Barry et al. U.S. Patent No. 6,615,258 B1.
- b. Ravishankar et al. U.S. Patent No. 6,778,509 B1.
- c. Shimbo et al. U.S. Patent No. 6,092,191.

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- d. Mao U.S. Patent No. 6,119,227.
- e. Paulsen et al. U.S. Patent No. 6,055,575.

**Conclusion**

Applicant's amendment with respect to claim 1 necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAMAL B. DIVECHA whose telephone number is 571-272-5863. The examiner can normally be reached on 10.00am-6.30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on 571-272-3939. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

May 13, 2005.

  
**ZARNI MAUNG**  
**SUPERVISORY PATENT EXAMINER**